**Amendments to the Claim:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1 (currently amended). A method of combinatorially generating a ~~glycopeptide~~ library comprising a plurality of different glycopeptides, comprising the steps of :

(a) ~~randomly glycosylating a platform having at least one glycosylation site with at least one glycosyl donor, optionally blocking unreacted glycosylation sites on the glycosylated platforms and optionally selectively removing one or more protecting groups on the carbohydrate groups introduced at the first level, whereby a~~ providing at least one first level library, ~~of glycosylated platforms is created, and then~~ each library comprising a plurality of different glycopeptides, said glycopeptides each comprising a core peptide and at least one carbohydrate structure, said glycopeptides being diversely glycosylated, where at least one carbohydrate structure of each of said glycopeptides provides at least one unblocked second level glycosylation site, such that reaction with a glycosyl donor at that site results in extension of said carbohydrate structure, and

(b) ~~optionally~~ randomly glycosylating said first level library ~~of glycosylated platforms, or a combination of first level libraries of glycosylated platforms,~~ by reacting the library with a mixture of at least ~~one~~ two different glycosyl donors, thereby enlarging the carbohydrate structures of a plurality of said glycopeptides ~~and optionally selectively removing one or more designated protecting groups on the carbohydrate groups introduced at the second level,~~ whereby a second level library ~~of glycosylated platforms~~ comprising glycopeptides of greater carbohydrate diversity is created.

2 (currently amended). A method according to claim 1, which further comprises further randomly glycosylating said second level library ~~of glycosylated platforms, or a combination of second level or first and second level libraries of glycosylated platforms, with at least one glycosyl donor, and optionally selectively removing one or more designated protecting groups on the carbohydrate groups introduced at the third level, whereby a third level library of glycosylated platforms is created, and optionally repeating the foregoing step~~ to produce ~~fourth and~~ a higher level ~~libraries~~ library of further increased carbohydrate diversity.

3 (currently amended). A method according to claim ~~2~~ 49, wherein said core peptide ~~has an~~ comprises the amino acid sequence (SEQ ID NO: 1) GVTSAPDTRPAPGSTA.

4 (currently amended). A method according to claim ~~2~~ 49, wherein said core peptide ~~has an~~ comprises the amino acid sequence (SEQ ID NO: 2) GSTA.

5 (currently amended). A method according to claim ~~2~~ 44, wherein ~~said unreacted~~ glycosylation sites which did not react with a glycosyl donor in step (a') are blocked prior to step (b).

6 (currently amended). A method according to claim 5, wherein said ~~sited~~ sites are blocked by acetylation.

7 (original). A method according to claim 3, wherein said glycosyl donors are selected from the group consisting of GalNAc, βGal(1-3)αGalNAc and sialyl.

8 (original). A method according to claim 4, wherein said glycosyl donors are selected from the group consisting of GalNAc, βGal(1-3)αGalNAc and sialyl.

9 (currently amended). A method according to claim 1, wherein hydroxyl groups on said glycosyl donors are protected prior to reaction of said glycosyl donors with said ~~platforms or said glycosylated platforms~~ glycopeptides.

10 (currently amended). A method according to claim 9,

wherein said hydroxyl groups are deprotected after reaction ~~with said platforms or said glycosylated platforms~~ glycopeptides.

11 (currently amended). A method according to claim 10, wherein some but not all of said hydroxyl groups are removed during said deprotection step.

12-15 (cancelled).

16 (currently amended). A method according to claim 1, wherein said core peptide ~~platform~~ comprises tandem repeats.

17 (currently amended). A method according to claim 1, wherein each glycosylation site on said ~~platform~~ core peptide is unique and distinguishable from other sites due to ~~distinct structural features in the vicinity of the site~~ the identity of the amino acid providing said glycosylation site and the identities of the immediately adjacent amino acids.

18 (cancelled).

19 (original). A method according to claim 1, wherein said glycosylation sites provide hydroxy functions for O-glycosylation or carboxy or carboxamido functional groups for N-glycosylation.

20 (currently amended). A method according to claim ~~1~~ 44, wherein said glycosylation sites of said unglycosylated peptides include one or more of serine, threonine, hydroxylysine and asparagine.

21 (currently amended). A method according to claim ~~1~~ 44, wherein said glycosylation sites of said unglycosylated peptides consist entirely of d-optical configuration.

22 (currently amended). A method according to claim 1, wherein said ~~platform~~ core peptide is constructed entirely of d-amino acids.

23 (currently amended). A method according to claim 1, wherein said ~~platform~~ core peptide is linear.

24 (currently amended). A method according to claim 1, wherein said ~~platform~~ core peptide is cyclic.

25 (currently amended). A method according to claim 1,

wherein said ~~platform~~ glycopeptide comprises a UV-active or fluorescent label.

26 (currently amended). A method according to claim 1, wherein said ~~platform~~ core peptide comprises hydrophobic amino acids which increase the solubility of the ~~platform~~ peptide in organic solvents.

27 (currently amended). A method according to claim ~~1~~ 44, wherein said glycosylation sites of said unglycosylated peptides are spaced, singly or in clusters, between sequences that include hydrophobic amino acids.

28 (currently amended). A method according to claim 1, wherein said glycopeptides comprise lipid chains ~~are incorporated into said platform~~.

29 (original). A method according to claim 1, wherein said glycosyl donors are unnatural.

30 (original). A method according to claim 1, wherein said glycosyl donors comprise structures associated with adhesion ligands for bacterial receptors that are expressed on human cell surface antigens.

31 (original). A method according to claim 1, wherein said glycosyl donors comprise structures associated with malignant cell antigens.

32-41 (cancelled).

42 (new). The method of claim 1 in which the core peptides for all of the glycopeptides provided in step (a) are identical.

43 (new). The method of claim 1 further comprising providing said first level library by (a') glycosylating at least one unglycosylated peptide, said unglycosylated peptide comprising at least one unblocked glycosylation site.

44 (new). The method of claim 43 in which step (a') is a random glycosylation obtained by reacting the unglycosylated peptides with a mixture of at least two different glycosyl donors.

45 (new). The method of claim 42 in which the core peptides for all of the glycopeptides of said first level library are identical.

46 (new). The method of claim 1 wherein all of the members of said second level library are glycopeptides.

47 (new). The method of claim 1 wherein all of the members of said first level library are glycopeptides.

48 (new). The method of claim 1 wherein said glycosyl donors comprise sialyl.

49 (new). The method of claim 1 wherein at least one core peptide is at least four amino acids long and is derived from a cancer-associated mucin.

50 (new). The method of claim 49 in which at least one core peptide is derived from a MUC1 core protein.

51 (new). The method of claim 1 wherein random glycosylation is achieved in step (b) by reacting the first level library with a mixture of at least three different glycosyl donors.

52 (new). The method of claim 1 wherein random glycosylation is achieved in step (b) by reacting the first level library with a mixture of not more than five different glycosyl donors.

53 (new). The method of claim 1 wherein the glycopeptides of said first level library each present not more than five unblocked glycosylation sites.